

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the above-referenced application.

Listing of Claims:

1. (Currently Amended) A transmission imager having a radiation source (2) for radiating radioactive rays from its target (2a), a radiation detector, and a specimen table (5) provided between the target (2a) and the radiation detector for having a specimen to be examined placed thereon, the radiation detector arranged with its detecting surface at the center (P) extending substantially at a right angle to a reference axis (L₁, L₂) which extends from the center [[P]] to the target (2a), characterized in that

the radiation detector is a combination of two, first and second, radiation detectors (3, 4), the first radiation detector (3) arranged to be moved to and from the target (2a) by the action of a driving mechanism (6) and thus positioned further from the target (2a) than the second radiation detector (4), and

the radiation source (2) is specifically arranged in relation to the two, first and second, radiation detectors (3, 4) so that its target (2a) comes at an angle to face a cathode (2b) which is disposed closer to the second radiation detector (4).

2. (Currently Amended) A transmission imager according to claim 1, wherein the radiation source (2) is specifically arranged in relation to the two, first and second, radiation detectors (3, 4) so that its maximum output axis (M) runs along the first one (L₁) of two reference axes (L₁, L₂) extending from the first radiation detector (3) or between the first reference axis (L₁) and the other or second reference axis (L₂) extending from the second radiation detector (4).

3. (Currently Amended) A transmission imager according to claim 1 or 2, wherein the second radiation detector (4) is a flat panel detector.

4. (Currently Amended) A transmission imager according to ~~any of claims 1 to 3~~ claim 1, wherein the first radiation detector (3) is an image intensifier (II).

5. (New) A transmission imager according to claim 2, wherein the second radiation detector is a flat panel detector.
6. (New) A transmission imager according to claim 2, wherein the first radiation detector is an image intensifier.
7. (New) A transmission imager according to claim 3, wherein the first radiation detector is an image intensifier.
8. (New) A transmission imager according to claim 4, wherein the first radiation detector is an image intensifier.
9. (New) A transmission imager according to claim 5, wherein the first radiation detector is an image intensifier.